

## LEVER ASSEMBLY FOR OPTICAL SCOPES

### CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] This non-provisional patent application claims priority to U.S. Provisional Patent Application Ser. No. 62/967,460, filed Jan. 29, 2020 and titled “LEVER ASSEMBLY FOR OPTICAL SCOPES,” the entire disclosure of which is hereby incorporated by reference.

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### STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0003] Not Applicable.

### REFERENCE TO SEQUENCE LISTING OR COMPUTER PROGRAM LISTING APPENDIX

[0004] Not Applicable.

### BACKGROUND OF THE INVENTION

[0005] The present invention relates generally to the field of optical scopes, and more particularly, to throw levers for optical scopes for firearms.

[0006] Optical scopes are often attached to or used in connection with firearms to facilitate aiming of a projectile. The term “rifle scope” will be used herein to refer to an optical scope adapted to be connected to a firearm such as a rifle. Modern rifle scopes typically allow adjustment for one or more of magnification, windage, elevation, and parallax. Magnification is usually controlled by a rotatable magnification adjustment ring or “power ring” located proximate to an eye bell at the rear of a rifle scope, whereas each of windage, elevation, and parallax are usually controlled by a corresponding rotatable adjustment knob or “turret” located forward of the magnification ring in the middle of the rifle scope.

[0007] The use of a throw lever to facilitate adjustment of the magnification ring of a rifle scope is known. Currently available throw levers typically include a small arm or other protrusion extending from an annular split collar which clamps around the magnification ring using one or more screws. However, such collars can slip off of the magnification ring when bumped during use, while the throw lever arm can obstruct a user’s view of the windage, elevation, and parallax turrets, as well as any attached bubble level or similar accessory, all of which can seriously impede scope adjustment, aiming, and subsequent delivery of accurate fire.

[0008] Accordingly, what is needed are improvements in throw levers and methods for facilitating the adjustment of optical scopes for firearms.

### BRIEF SUMMARY

[0009] This Brief Summary is provided to introduce a selection of concepts in a simplified form that are further described below in the Detailed Description. This Summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used

as an aid in determining the scope of the claimed subject matter. Features of the presently disclosed invention overcome or minimize some or all of the identified deficiencies of the prior art, as will become evident to those of ordinary skill in the art after a study of the information presented in this document.

[0010] Disclosed herein is a lever assembly for an optical scope having a mounting surface, a mounting hole, and one or more windage, elevation, and/or parallax turrets with indicia thereon. The lever assembly includes a generally triangular lever member which defines a large central opening or window through which a user can easily view turret indicia along a sightline parallel to an axis of the optical scope when the lever assembly is secured to the scope. The lever member includes a base portion adapted to engage the mounting surface of the optical scope, which can be a portion of a magnification adjustment ring. A mounting member can extend through the base portion of the lever member and into the mounting hole defined in the mounting surface to reliably secure the lever member to the optical scope. The lever assembly of the present invention advantageously provides an unobstructed view of turret indicia during use while simultaneously ensuring that the lever member cannot be inadvertently dislodged from the optical scope.

[0011] Accordingly, in one aspect, the invention provides a lever assembly for an optical scope defining a mounting surface, a mounting hole, and indicia, the lever assembly comprising a lever member and a mounting member. The lever member comprises a base portion adapted to engage the mounting surface, and an extension portion extending from the base portion. The mounting member is adapted to secure the base portion to the mounting surface by engaging the mounting hole. The base portion and the extension portion define a lever sightline along which the indicia can be viewed when the lever member is secured to the mounting surface.

[0012] In another aspect, the invention provides a lever assembly for an optical scope defining a mounting surface, a mounting hole, and indicia, the lever assembly comprising a lever member and a mounting member. The lever member comprises a base portion comprising a base main wall defining an engaging surface adapted to engage the mounting surface and a base hole extending through the base main wall, and an extension portion comprising at least one extension side wall extending from the base main wall. The mounting member is receivable in the mounting hole through the base hole to secure the lever member to the mounting surface. The base main wall and the at least one extension side wall define a lever opening through which the indicia can be viewed along a lever sightline when the lever member is secured to the mounting surface.

[0013] In yet another aspect, the invention provides a lever assembly for an optical scope defining a mounting surface, a mounting hole, and indicia, the lever assembly comprising a lever member and a mounting member. The lever member comprises a base portion comprising a base main wall defining an engaging surface adapted to engage the mounting surface, and an extension portion comprising at least one extension side wall extending from the base main wall such that a lever sightline is defined by the base main wall and the at least one extension side wall. The mounting member is adapted to secure the base main wall to the mounting surface by engaging the mounting hole. The mounting member